



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/975,021	10/12/2001	Yutaka Morikawa	081848-0183	7597

22428 7590 06/30/2005

FOLEY AND LARDNER  
SUITE 500  
3000 K STREET NW  
WASHINGTON, DC 20007

EXAMINER
----------

TRINH, TAN H

ART UNIT	PAPER NUMBER
----------	--------------

2684

DATE MAILED: 06/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<p align="center"><b>Office Action Summary</b></p>	<p><b>Application No.</b></p> <p>09/975,021</p>	<p><b>Applicant(s)</b></p> <p>YUTAKA MORIKAWA</p>	
	<p><b>Examiner</b></p> <p>TAN TRINH</p>	<p><b>Art Unit</b></p> <p>2684</p>	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 March 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 May 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pasternak (U.S. Patent No. 5,936,949) in view of Evans (U.S. Patent No. 6,240,556).

Regarding claims 1 and 5, Pasternak teaches a point-to-multipoint wireless access system (see fig. 1) comprising a wireless base station (see fig. 1, wireless base station 100), a plurality of wireless subscriber's terminals (see fig. 1, wireless subscriber's terminals 102-103), a plurality of down-link channels for transmitting data from the wireless base station to respective the wireless subscriber's terminals (see fig. 1, col. 2, lines 7-16), and a plurality of up-link channels for transmitting data from respective the wireless subscriber's terminal to the wireless base station (see fig. 1, col. 2, lines 7-27 and lines 43-65), wherein the down-link channels use a first wireless band and the up-link channels use a second wireless band (see figs. 1-3, col. 5, line 39-col. 6, line 9), Wherein the first wireless band is one of 26-GHz, 28-GHz, 38-GHz, 42-GHz, 5.3-GHz and 60-GHz (see col. 1, lines 60-62 and col. 6, lines 2-6). But Pasternak fails to teach the second wireless band is one of 2.4-GHz, ISM, 5-GHz and an optical frequency band.

However, Evans teaches the second wireless band is one of 2.4-GHz, ISM, 5-GHz (see abstract lines 1-5).

Therefore, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Pasternak system and by the providing of the teaching of Evans on the range from 0.3 to 300 GHz bands technique, thereto in order to provide user with more bands in point-to-multipoint with long and short range.

Regarding claim 2, Pasternak teaches wherein the wireless base station is connected to the internet through a communication network (see col. 1, lines 16-18), each of the wireless subscriber's terminals is connected to a user's terminal through a user's Ethernet (see col. 9, line 54-col. 10, line 3), and the first wireless band is higher than the second wireless band (see figs. 1-3, col. 5, line 39-col. 6, line 9).

Regarding claim 3, Pasternak teaches wherein the wireless base station is connected to the internet through a communication network (see col. 1, lines 16-18), at least one of the wireless subscriber's terminals is connected to a user server through an Ethernet (see col. 9, line 54-col. 10, line 3), and the first wireless band is lower than the second wireless band (see col. 6, lines 2-3).

Regarding claim 4, Pasternak teaches wherein the wireless base station has a gateway function (see fig. 2, ATM Switch and ISDN Switch, col. 5, lines 50-61), and each of the subscriber's terminals is a wireless module connected to a data terminal (see fig. 2, wireless module (Subscriber radio Unit (SRU) 202) connected 203 to Subscriber Access system (SAS) 204 and data terminal (End-user), col. 5, lines 50-61).

Regarding claim 6, Evans teaches wherein the sub-millimeter waveband or the millimeter waveband is one of 26-GHz, 28-GHz, 38-GHz and 42-GHz frequency bands (see abstract lines 1-5).

Regarding claim 7, Evans teaches teach the first wireless band is a 5.3-GHz frequency band (wherein Down link range from 0.3-300 GHz), and the second wireless band is a 2.4-GHz ISM band (wherein uplink range from 0.3-300 GHz) (see abstract lines 1-5).

Regarding claim 8, Evans teaches teach the first wireless band is a 60-GHz frequency band (wherein down link range from 0.3-300 GHz), and the second wireless band is a 5-GHz frequency band (wherein uplink range from 0.3-300 GHz) (see abstract for transmitting and receiving lines 1-5).

Regarding claim 9, Pasternak wherein the first wireless band is a sub-millimeter waveband or a millimeter waveband (see col. 1, lines 61-62 and col. 6, lines 3-9), and the up-channel uses an optical signal (see col. 1, lines 16-21).

### ***Response to Arguments***

3. Applicant's arguments filed 3-21-2005 have been fully considered but they are not persuasive.

Applicant argues that the reference of Evans does not teach two separate frequency bands for uplink and downlink. However, the examiner does not agree, since the Evans reference teaches, the point-to-multipoint star configured terrestrial radio communication system having at least one base station **transmitting** (downlink) to and **receiving** (uplink) RF communication signals from a plurality of associated subscriber stations in the 0.3-300 GigaHertz (GHz) range (see abstract lines 1-5). Therefore the reference of Evans is teaching the two separate frequency bands for uplink and downlink.

In re Reven (CCPA) 156 USPQ 679. Appellant claims a particle size of from about 15 to about 30 millimicrons. Rule discloses a much broader range, i.e., from 10 to 130 millimicrons, but states that in a specific embodiment giving "especially advantageous results," the average particle size is from 15 to 30 millimicrons. Similarly, Rule discloses a silica: alkali oxide mole ratio of 130:1 to 500:1, while appellant claims a  $\text{SiO}_2$ : $\text{Na}_2\text{O}$  ratio of 150:1 to 350:1. We think it sufficient to note that the range disclosed in Rule envelops the range claimed by appellant, and that appellant has produced no evidence tending to show superior results because of his selection of the narrower range within the disclosed range. The examiner noted, and we agree that, absent a showing to the contrary, discovering particular ranges within a range disclosed by the prior art would be within the skill of the art.

### *Conclusion*

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

Art Unit: 2684

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

5. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**or faxed to:**

**(571) 273-8300, (for Technology Center 2600 only)**

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tan Trinh whose telephone number is (571) 272-7888. The examiner can normally be reached on Monday-Friday from 9:30 AM to 6:00 PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung, can be reached at (571) 272-7882.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the **Technology Center 2600 Customer Service Office** whose telephone number is **(703) 306-0377**.

Art Unit: 2684

7. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tan H. Trinh   
Art Unit 2684  
June 23, 2005

  
NAY MAUNG  
SUPERVISORY PATENT EXAMINER